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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/701,096	11/04/2003	David A. Beck	VOI0156.DIV	4401

7590

03/23/2005

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EXAMINER

CHEVALIER, ALICIA ANN

ART UNIT

PAPER NUMBER

1772

DATE MAILED: 03/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/701,096

Applicant(s)

BECK, DAVID A.

Examiner

Alicia Chevalier

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 04 November 2003.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-9 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 11/4/03.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. Claims 1-9 are pending in the application, claims 10-19 have been cancelled in the preliminary amendment, filed November 4, 2003.
2. Amendments to claims, filed on November 4, 2003, have been entered in the above-identified application.

#### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

4. Claims 1-4 and 6-8 are rejected under 35 U.S.C. 102(e) as being anticipated by Klare et al. (U.S. Patent No. 6,228,4778).

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Regarding Applicant's claim 1, Klare discloses a unitary membrane (*porous membrane structure, title*) comprising a semipermeable portion having a plurality of intercommunicating pores and is deemed to have a pair of longitudinal edge portions (*col. 3, lines 53-65 and figure 1*). The unitary membrane comprises a formed fabric with a thickness of less than about 0.1 inches (*col. 13, lines 10-11*) and a permeability greater than zero and less than about 5 CFM per foot (*col. 11, line 62*).

The preamble "for use in a pressing apparatus" is deemed to be a statement with regard to the intended use and is not further limiting in so far as the structure of the product is concerned. In article claims, a claimed intended use must result in a *structural difference* between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. MPEP § 2111.02.

Regarding Applicant's claim 2, Klare discloses that the permeability is greater than 0 but less than about 2 CFM per square foot (*col. 11, line 62*).

Regarding Applicant's claim 3, the method of determining the permeability of the product is not germane to the issue of patentability of the product itself, unless Applicant presents evidence from which the Examiner could reasonably conclude that the claimed method of determining permeability makes the claimed product structurally different from those of the prior art.

Regarding Applicant's claim 5, Klare discloses that the pair of longitudinal edge portions are impermeable, since the reference discloses that the membrane is liquid penetration resistance (*col. 7, lines 18-19*).

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Regarding Applicant's claim 6, Klare discloses that the formed fabric forms a flow resistance layer near a surface of the unitary membrane, since the reference discloses that the membrane is liquid penetration resistance (*col. 7, lines 18-19*).

Regarding Applicant's claim 7, Klare discloses that the unitary membrane further comprises a fluid distribution layer adjacent the flow resistant layer (*shell fabric, col. 3, line 61*).

Regarding Applicant's claim 8, the unitary membrane is deemed to have an abrasion resistant surface, since the reference discloses that the membrane comprises a formed fabric (*col. 3, lines 53-65*).

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 5 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klare as applied above.

Klare is relied upon as described above.

Klare fails to disclose that the cross section of the unitary membrane has a trapezoidal shape or discloses that the semipermeable portion has a void percentage of less than 40%.

It would have been an obvious matter of design choice to change the shape of cross section of the membrane, since a modification would have involved a mere change in size of the

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membrane. A change in size or shape is generally recognized as being within the level of ordinary skill in the art, absent unexpected results. MPEP 2144.04 (I) and (IV).

The exact void percentage of the membrane is deemed to be a result effective variable with regard to the permeability. It would require routine experimentation to determine the optimum value of a result effective variable, such as void percentage, in the absence of a showing of criticality in the claimed void percentage. *In re Boesch*, 205 USPQ 215 (CCPA 1980), *In re Woodruff*, 16 USPQ2d 1934, 1936 (Fed. Cir. 1990).

7. Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klare.

Regarding Applicant's claims 1 and 2, Klare discloses a unitary membrane (*porous membrane structure, title*) comprising a semipermeable portion having a plurality of intercommunicating pores and is deemed to have a pair of longitudinal edge portions (*col. 3, lines 53-65 and figure 1*). The unitary membrane comprises a formed fabric with a thickness of less than about 0.1 inches (*col. 13, lines 10-11*) and a permeability greater than zero and less than about 5 CFM per foot (*col. 11, line 62*).

The preamble "for use in a pressing apparatus" is deemed to be a statement with regard to the intended use and is not further limiting in so far as the structure of the product is concerned. In article claims, a claimed intended use must result in a **structural difference** between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. MPEP § 2111.02.

In the alternative that Klare fails to disclose a permeability greater than 0 and less than about 5 CFM/ft<sup>2</sup>, more specifically 2 CFM/ft<sup>2</sup>, as measured by TAPPI test method TIP 0404-20. Since the reference discloses permeability of 1.21 CFM per square foot as measured by a Frazier

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Air Permeability Tester (*col. 11, lines 61-63*) that one of ordinary skill in this art would have expected similar results with a TAPPI test method TIP 0404-20.

Regarding Applicant's claim 3, the method of determining the permeability of the product is not germane to the issue of patentability of the product itself, unless Applicant presents evidence from which the Examiner could reasonably conclude that the claimed method of determining permeability makes the claimed product structurally different from those of the prior art.

Regarding Applicant's claim 4, Klare fails to disclose that the cross section of the unitary membrane has a trapezoidal shape. However, it would have been an obvious matter of design choice to change the shape of cross section of the membrane, since a modification would have involved a mere change in size of the membrane. A change in size or shape is generally recognized as being within the level of ordinary skill in the art, absent unexpected results. MPEP 2144.04 (I) and (IV).

Regarding Applicant's claim 5, Klare discloses that the pair of longitudinal edge portions are impermeable, since the reference discloses that the membrane is liquid penetration resistance (*col. 7, lines 18-19*).

Regarding Applicant's claim 6, Klare discloses that the formed fabric forms a flow resistance layer near a surface of the unitary membrane, since the reference discloses that the membrane is liquid penetration resistance (*col. 7, lines 18-19*).

Regarding Applicant's claim 7, Klare discloses that the unitary membrane further comprises a fluid distribution layer adjacent the flow resistant layer (*shell fabric, col. 3, line 61*).

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Regarding Applicant's claim 8, the unitary membrane is deemed to have an abrasion resistant surface, since the reference discloses that the membrane comprises a formed fabric (*col. 3, lines 53-65*).

Regarding Applicant's claim 9, Klare fails to disclose that the semipermeable portion has a void percentage of less than 40%. However, the exact void percentage of the membrane is deemed to be a result effective variable with regard to the permeability. It would require routine experimentation to determine the optimum value of a result effective variable, such as void percentage, in the absence of a showing of criticality in the claimed void percentage. *In re Boesch*, 205 USPQ 215 (CCPA 1980), *In re Woodruff*, 16 USPQ2d 1934, 1936 (Fed. Cir. 1990).

### ***Conclusion***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alicia Chevalier whose telephone number is (571) 272-1490. The examiner can normally be reached on Monday through Friday from 8:00 am to 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon, can be reached on (571) 272-1498. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Alicia Chevalier

3/19/05